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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/666,074	09/21/2000	Bret Alden Greenstein	AUS9-2000-0384-US1	8919
35525	7590	10/17/2006	EXAMINER	
IBM CORP (YA)			WON, MICHAEL YOUNG	
C/O YEE & ASSOCIATES PC				
P.O. BOX 802333			ART UNIT	
DALLAS, TX 75380			PAPER NUMBER	
			2155	

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/666,074		GREENSTEIN ET AL.	
	Examiner		Art Unit	
	Michael Y. Won		2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-27,43-49 and 53-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-27,43-49 and 53-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the amendment filed August 2, 2006.
2. Claims 23 and 45 have been amended and new claims 55 and 56 have been added.
3. Claims 21-27, 43-49, and 53-55 have been examined and are pending with this action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 21-22, 43-44, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noma et al. (US 6,954,902 B2) in view of Dawson (US 5,727,155 A).

INDEPENDENT:

As per **claim 21**, Noma teaches a method in a data processing system, comprising:

rendering a three-dimensional environment on a client computer associated with a first participant to form a rendered three-dimensional environment (see Fig.4; col.1, lines 40-44: "A visual chat system is a chat system where avatar... is displayed in 2-dimensional or 3-dimensional virtual space displayed on the screen of a personal computer"; and col.6, lines 10-19);

receiving shared data from a client computer associated with a second participant, wherein the shared data includes information to be shared between the second participant and the first participant (see col.5, lines 48-61); and

displaying a virtual representation of the shared data in the rendered three-dimensional environment on the client computer associated with the first participant (see Fig.4 and col.5, lines 56-61).

Noma does not explicitly teach of the shared data includes access control information indicating an access control level for the first participant and displaying based on the access control level of the first participant.

Dawson teaches of shared data including access control information indicating an access control level for the first participant (see abstract and col.2, lines 5-17) and displaying based on the access control level of the first participant (see col.2, lines 38-43).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Noma in view of Dawson so that shared data includes access control information indicating an access control level for the first participant and displaying based on the access control level of the first participant. One

would be motivated to do so because Noma teaches that one user may wish to “impose limitations on other users” (see col.8, line 62-64).

As per **claim 43**, Noma teaches an apparatus, comprising:

rendering means for rendering a three-dimensional environment on a client computer associated with a first participant to form a rendered three-dimensional environment (see Fig.4; col.1, lines 40-44: “A visual chat system is a chat system where avatar... is displayed in 2-dimensional or 3-dimensional virtual space displayed on the screen of a personal computer”; and col.6, lines 10-19);

receipt means for receiving shared data from a client computer associated with a second participant, wherein the shared data includes information to be shared between the second participant and the first participant (see col.5, lines 48-61); and

display means for displaying a virtual representation of the shared data in the rendered three-dimensional environment on the client computer associated with the first participant (see Fig.4 and col.5, lines 56-61).

Noma does not explicitly teach of the shared data includes access control information indicating an access control level for the first participant and displaying based on the access control level of the first participant.

Dawson teaches of shared data including access control information indicating an access control level for the first participant (see abstract and col.2, lines 5-17) and displaying based on the access control level of the first participant (see col.2, lines 38-43).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Noma in view of Dawson so that shared data includes access control information indicating an access control level for the first participant and displaying based on the access control level of the first participant. One would be motivated to do so because Noma teaches that one user may wish to “impose limitations on other users” (see col.8, line 62-64).

As per **claim 53**, Noma teaches a computer program product, in a computer readable medium, comprising:

instructions for rendering a three-dimensional environment on a client computer associated with a first participant to form a rendered three-dimensional environment (see Fig.4; col.1, lines 40-44: “A visual chat system is a chat system where avatar... is displayed in 2-dimensional or 3-dimensional virtual space displayed on the screen of a personal computer”; and col.6, lines 10-19);

instructions for receiving shared data from a client computer associated with a second participant, wherein the shared data includes information to be shared between the second participant and the first participant (see col.5, lines 48-61); and

instructions for displaying a virtual representation of the shared data in the rendered three-dimensional environment on the client computer associated with the first participant (see Fig.4 and col.5, lines 56-61).

Noma does not explicitly teach of the shared data includes access control information indicating an access control level for the first participant and displaying based on the access control level of the first participant.

Dawson teaches of shared data including access control information indicating an access control level for the first participant (see abstract and col.2, lines 5-17) and displaying based on the access control level of the first participant (see col.2, lines 38-43).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Noma in view of Dawson so that shared data includes access control information indicating an access control level for the first participant and displaying based on the access control level of the first participant. One would be motivated to do so because Noma teaches that one user may wish to “impose limitations on other users” (see col.8, line 62-64).

DEPENDENT:

As per **claims 22 and 44**, which depend on claims 21 and 43, respectively, Noma does not explicitly teach wherein the access control level is one of ownership, authorship, viewership, monitorship, and blind.

Dawson further teaches wherein the access control level is one of ownership, authorship, viewership, monitorship, and blind (see col.2, lines 1-3 and col.8, lines 25-30).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Noma in view of Dawson so that the access control level is one of ownership, authorship, viewership, monitorship, and blind.

One would be motivated to do so because Noma teaches that one user may wish to “impose limitations on other users” (see col.8, line 62-64).

5. Claims 23-27, 45-49, and 55-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noma et al. (US 6,954,902 B2) in view of Dawson (US 5,727,155 A) and Matsuura et al. (US 6,753,857 B1).

As per **claims 23 and 45**, which depend on claims 21 and 43, respectively, Noma does not further teach of receiving voice information provided by each participant; receiving a request to modify the shared data; and determining whether the first participant has a sufficient access control level based on the access control information.

Dawson further teaches of receiving a request to modify the shared data; and determining whether the first participant has a sufficient access control level based on the access control information (see col.2, lines 35-38).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Noma in view of Dawson so that a request to modify the shared data can be received; and whether the first participant has a sufficient access control level based on the access control information can be determined. One would be motivated to do so because Noma teaches that one user may wish to “impose limitations on other users” (see col.8, line 62-64).

Matsuura teaches of receiving voice information provided by each participant (see col.2, lines 41-42 & 50-58).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Noma in view of Matsuura so that each participant provides voice information. One would be motivated to do so because Noma teaches of displaying utterances of the user (see col.6, lines 62-64).

As per **claims 24 and 46**, which depend on claims 23 and 45, respectively, Noma does not further teach of modifying the shared data if the first participant has sufficient access control level.

Dawson further teaches of modifying the shared data if the first participant has sufficient access control level (see col.2, lines 41-43 and col.8, lines 38-43).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Noma in view of Dawson so that a shared data is modified if the first participant has sufficient access control level. One would be motivated to do so because Noma teaches of exchanging shared data (see col.3, line 11), but expressed that one user may wish to "impose limitations on other users" (see col.8, line 62-64).

As per **claims 25 and 47**, which depend on claims 24 and 46, respectively, Noma does not further teach of generating a shared data update event indicating the modification; and sending the shared data update event to at least one other participant.

Dawson further teaches of generating a shared data update event indicating the modification; and sending the shared data update event to at least one other participant (see col.6, lines 55-58 and col.11, lines 40-49).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Noma in view of Dawson so that a shared data update event is generated indicating the modification; and the shared data update event is sent to at least one other participant. One would be motivated to do so because such means avoids stale and non-synchronous data.

As per **claims 26 and 48**, which depend on claims 23 and 5 respectively, Noma does not further teach of notifying the first participant of insufficient access control if the first participant does not have a sufficient access control level

Dawson further teaches of notifying the first participant of insufficient access control if the first participant does not have a sufficient access control level (see col.8, lines 21-24 and col.12, lines 8-13).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Noma in view of Dawson so that the first participant is notified of insufficient access control if the first participant does not have a sufficient access control level. One would be motivated to do so because such notifying allows participant to know their access level.

As per **claims 27 and 49**, which depend on claims 21 and 43, respectively, Noma and Dawson teach of further comprising:

receiving a shared data update event indicating a modification to the shared data (see claim 25 rejection above);

modifying the shared data according to the shared data update event to form modified data (see claim 24 rejection above); and

displaying a modified representation of the modified data in the rendered three-dimensional environment based on the access control level of the first participant (see claim 21 rejection above).

As per **claims 55 and 56**, which depend on claims 21 and 43, respectively, although Noma teaches wherein the shared data includes three-dimensional data of an image (see claim 21 and claim 43 rejection above) that a participant is able to walk around within the rendered three-dimensional environment (see col.6, line 65-col.7, line 4), Noma does not explicitly teach wherein the image is able to be rotated about three axes by the participant within the rendered three-dimensional environment.

Matsuura teaches wherein the image is able to be rotated about three axes by the participant within the rendered three-dimensional environment (see col.10, line 55-col.11, line 23).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Noma in view of Matsuura so image is able to be rotated about three axes by the participant within the rendered three-dimensional environment. One would be motivated to do so because that a participant is able to walk around within the rendered three-dimensional environment (see col.6, line 65-col.7, line 4).

Response to Arguments

6. Applicant's arguments filed August 2, 2006 have been fully considered but they are not persuasive.

A. The applicant(s) argue that Noma does not teach "rendering a three-dimensional environment on a client computer associated with a first participant to form a rendered three-dimensional environment" and Dawson does not suffice this deficiency. Based on this assertion the applicant(s) state that 35 USC 103 (a) rejection of Noma in view of Dawson does not teach the claimed invention.

Responsive to the above argument additional reference location has been provide to better teach this limitation. Dawson clearly teaches "A visual chat system is a chat system where avatar... is displayed in 2-dimensional or 3-dimensional virtual space displayed on the screen of a personal computer" (see col.1, lines 40-44).

B. The applicant(s) argue that Noma does not teach the amended limitation of "receiving voice information provided by each participant" as recited in claims 53 and 45.

Responsive to this argument, the examiner agrees that neither Noma nor Dawson teaches this limitation. However, previously cited reference Matsuura clearly and explicitly meets this limitation (see rejection above).

C. The applicant(s) argue that because Noma and Dawson does not teach the limitation of A. above, that they cannot teach, "displaying a modified representation of the modified data in the rendered three-dimensional environment based on the access control level of the first participant" as recited in claims 27 and 49.

Responsive to this argument, clearly Noma does teach the argument of A. and therefore, since Dawson teaches the limitation of modifying the shared data, this limitation is clearly taught by Noma in view of Dawson.

D. The applicant(s) argue that Noma nor Dawson teaches the limitation of new claims 55 and 56.

Responsive to this argument, the applicant(s) are suggested to see the rejection set forth above. Clearly, the previously cited reference Matsuura teaches the missing limitation.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

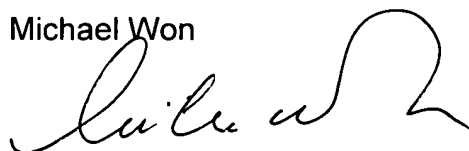
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Y. Won whose telephone number is 571-272-3993. The examiner can normally be reached on M-Th: 7AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael Won



October 6, 2006



SALEH NAJJAR
SUPERVISORY PATENT EXAMINER